



Intel[®] 82599 10 Gigabit Ethernet Controller Feature Software Support

LAN Access Division

Revision: 1.1
February 2012



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Revisions

Rev	Date	Notes
1.0	July 2011	Initial release (Intel Confidential).
1.1	February 15, 2012	Updated disclaimer. Removed confidential stamp for public release. Removed references to header replication and header splitting as these features are not supported. Removed No-Snoop references.



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1.0 Features Supported By Software

The following two tables detail feature and operating system support provided by software driver release 16.81.

Note that the feature set for silicon does not change with every software release. A summary of changes contained in individual document revisions is provided in this document's revision history.

Table 1. Features

Features	Windows* inf name: 1xn	Linux* Driver Name: ixgbe
Link Modes: Copper w/ External PHY ¹ Device ID: 151C SGMII XAUI (BX4) Device ID: 10FC Combined Backplane KX/KX4/KR Device ID: 10F8 CX4 Device ID: 10F9 SFI Device ID: 10FC BX	10GBASE-T and 1000BASE-T No Yes Yes Yes Yes No	10GBASE-T and 1000BASE-T No Yes Yes Yes Yes No
Link Flow Control	Yes	Yes
Priority Flow Control	Yes	Yes
Transmit Allocation Buffers Driver Uses	Range 128-4096, default is 512	Range 128-4096, default is 512
Receive Allocation Buffers Driver Uses	Range 128-4096, default is 512	Range 128-4096, default is 512
Checksum Offload	Yes (IPv4/IPv6,TCP,UDP,Tx/Rx)	Yes (IPv4/IPv6,TCP,UDP,Tx/Rx)
Large Send Offload (TSO)	Yes (up to 64 KB)	Yes (up to 64 KB)
SCTP Receive and Transmit Checksum Offload	Yes	Yes
Interrupt Moderation Rate	Yes	Yes
Message Signaled Interrupts (MSI)	Yes	Yes
Message Signaled Interrupts (MSI-X) Number of Vectors	Yes	Yes
Jumbo Packet	Yes (4088 and 9014 bytes)	Yes (4088 and 9014 bytes)
Receive Side Scaling (RSS)	Yes	Yes
RSS Receive Queues	12	12
OS2BMC	N/A	N/A
Wake from S1 –S3	No	Yes
Wake from S5	Yes (KR interface only)	Yes (KR interface only)
Data Center Bridging (DCB)	Yes	Yes
Virtualization (SR-IOV)	No (plan to support in NDIS 6.30)	Yes



Table 1. Features

VMDq	Yes	Yes
Fiber Channel over Ethernet (FCoE)	Yes	Yes
Receive Side Coalescing (RSC)	Yes	Yes
IEEE 1588	No	No
MacSec	No	No
Flow Director (FD)	No	SW ATR only
Low Latency Interrupts (LLI)	Yes	Yes
Yes = Support provide in the LAN driver		
No = No Support provided in the LAN driver		
N/A = Not supported in 82580 silicon		

1. Itanium® Product Family.

Table 2. Operating Systems

Operating Systems	IA32	X64	IPF ¹
Windows XP Professional SP3	No	No	N/A
Windows Vista SP2 (no KR support)	Yes	Yes	N/A
Windows 7 (no KR support)	Yes	Yes	N/A
Windows Server 2003 SP2	Yes	Yes	Yes
Windows Server 2008 SP2	Yes	Yes	Yes
Windows Server 2008 SP2 Core	Yes	Yes	N/A
Windows Server 2008 SP2 (w/ Hyper-V role)	N/A	Yes	N/A
Hyper-V Server 2008 SP2	N/A	Yes	N/A
Windows Server 2008 R2	N/A	Yes	Yes
Windows Server 2008 R2 Core	N/A	Yes	Yes
Windows Server 2008 R2 (w/ Hyper-V role)	N/A	Yes	N/A
Hyper-V Server 2008 R2	N/A	Yes	N/A
Win PE	Yes	Yes	N/A
Linux Stable Kernel version 2.6	Yes	Yes	N/A



Table 2. Operating Systems

Linux RHEL 5.6	Yes	Yes	N/A
Linux RHEL 6.1	Yes	Yes	Yes
Linux SLES 11 SP1	Yes	Yes	No
Linux SLES 10 SP4	Yes	Yes	Yes
FreeBSD 8	Yes	Yes	N/A
UnixWare 7.1.4	No	No	No
SCO OpenServer 5.0.7 and 6.0	No	No	No
DOS NDIS 2	No	No	No
DOS ODI	No	No	No
EFI 1.1	No	N/A	Yes
UEFI 2.1	No	Yes	Yes
Vmware ESX 4.0 ²	N/A	Yes	N/A
Vmware ESX 4.1 ²	N/A	Yes	N/A

Notes:

1. Itanium® Product Family
2. VMware* ESX drivers are not included on LAD SW Releases, they are only available from VMware's web site and they are released on a separate schedule.





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